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ABSTRACT

This theme journal issue focuses on current activities of the Office of Special Education and Rehabilitative Services which stress inclusion of students with disabilities in the mainstream. It begins with a message from the Assistant Secretary, Robert R. Davila which examines the full meaning of an "inclusive" education. Next, Barbara Buswell and Beth Schaffner, in "Building Friendships--An Important Part of Schooling", focus on how development of integrated friendships can be supported with examples from the PEAK Integration Project. "The Career Ladder Program Multi-district Outreach: The Road to Success" (by Shepherd Siegel and Deborah Brians) stresses principles of integration underlying this San Francisco (California) program. The following article, by Shirin D. Antia and Kathryn Kreimeyer, titled "Project Interact: Interventions for Social Integration of Young Hearing-Impaired Children," reports on two studies comparing the effectiveness of a social skills intervention and an integrated activities intervention. The following article, "Why Are These People Working?", by Frank Simpson, reports on employment activities and outcomes fostered by the Helen Keller Services for the Blind. Next, Judith A. Cook, in "Thresholds Theater Arts Program," describes vocational opportunities developed by the Thresholds National Research and Training Center on Rehabilitation and Mental Illness in Chicago (Illinois). "Closing the Sheltered Workshop: A Case Study of Agency Change" (Stephen Murphy and Pat Rogan) examines the change process at the Pioneer Activities Center (Syracuse, New York). Finally, Kenneth D. Gadow, summarizes the literature on "Medication and School Behavior." (Most articles include references.) (DB)

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A Message from the Assistant Secretary

Robert R. Davila, Ph.D.

At the Edward Smith School in Syracuse, New York, inclusive education takes different forms for different students, depending on their individual needs. For one student, it means that his classroom has a teacher assistant and half the average number of students, plus three students with extensive special needs. His speech therapist comes into the classroom to work with him during part of math period four days a week and his language arts period includes recreation with a peer. This school has placed a priority on including every child in the regular classroom, and has implemented many of the supports necessary to make that happen in ways that are beneficial to students, to staff, and to the larger community.

I recently heard about a young woman who is deaf and will soon graduate from a state supported school for children and youth who are deaf. Many people would interpret this placement to mean that she is not in an "inclusive" setting, but she would quickly set the record straight. Her long list of extracurricular activities also includes participation in the annual school play, where she has built sets, chaired the make-up committee, played a variety of roles ranging from bit parts to the lead, and even been student director. She firmly believes that this kind of experience has given her the knowledge, skills, and abilities to help prepare for a leadership role in the state university she plans to attend. Who, then, is to say that this is not inclusive education?

My point with these examples is that inclusion is not a place. It transcends the idea of physical location and incorporates basic values that insist on participation, friendship, and interaction in all aspects of education and community life. And it embraces children and adults by providing necessary support systems.

The Office of Special Education and Rehabilitative Services supports the goal of inclusion for children and adults with disabilities in a number of ways. It is one of our four areas of emphasis (along with early intervention, family support, and empowerment). Throughout OSERS we have a commitment to ensure that opportunities for meaningful inclusion are available to meet the needs of students with disabilities for special education and related services, and of adults with disabilities in the work place and in the community.

As part of our commitment to inclusion, OSERS supports activities to develop innovative systems to effectively support children with disabilities in regular classrooms, and activities that encourage the development of models of supported employment that provide integrated work experiences for adults with disabilities. Other OSERS activities encourage the development of community-based services, and the creative utilization of social and peer group situations to encourage friendships and closer relationships between disabled and nondisabled children and adults. We are learning more every day about what it takes to support children in inclusive settings, but we still have much to learn. And then, like the Edward Smith School community, we must implement these supports as needed.

An inclusive environment is one in which no child or adult will ever have to bear the unfair burden of being present but still being absent in terms of the benefit that comes through real interaction with nondisabled peers. The other day I read a letter from the parent of a severely disabled child. The parent made the point that, although her child was in a regular school, he was still separated from his nondisabled peers. She described her child's involvement in the school play, standing at the edge of the stage, staring into the audience without really participating. So, although the child was part of the group in some ways—sitting in the same lunchroom with his nondisabled peers, playing on the same playground—in other ways, he was isolated. That's what inclusion is not.

It continues to be a source of concern to me and to others, especially to families, that many people of all ages are still not getting the necessary support to allow the full benefit of meaningful inclusion. As a result, they are not being allowed to work toward the underlying goal of all that we do here at OSERS—that is, assisting people with disabilities to achieve their full potential and enhance their participation and productivity.

Our society became more inclusive with the passage of the Americans with Disabilities Act in 1990, and it becomes more inclusive every time the individual needs of a child with disabilities—rather than the existing system and structure of services—are considered first in determining the kind of educational services that child will receive and where he or she will receive them. This country leads the world in including individuals from diverse backgrounds in all aspects of American life. People with disabilities should expect no less.

Inclusion

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Building Friendships– *An Important Part of Schooling*

Photo: D. David Snyder

Barbara Buswell, Director

Beth Schaffner, Coordinator

The PEAK Integration Project

"From his father's and my perspective, the most crucial aspect of a good life for John is that he is connected in his community—that he have friends who appreciate and care about him and who will look out for him."

(PEAK Parent Center, Inc., 1991)

For many parents of students who receive special education support in schools, friendship is the "bottom line." All people need friends for companionship, encouragement, and support. Friendships add richness to children's lives as well as teach crucial skills for getting along with others. Because of the importance of friendship, there is a growing recognition that *all* children, no matter how severe their disabilities, have similar needs to belong, to be valued members of their

school and neighborhood communities, and to have friendships that extend beyond the school day. Robert Perske (1988) states, ". . . we have just begun to sense the pain experienced by people with disabilities when they are deprived of mutually satisfying friendships with ordinary people. We suddenly see that family supports, regular schooling, and community living programs are not enough."

The first step toward meeting students' needs for friendship and belonging is full school inclusion in regular classes in the same school where typical kids in their neighborhood attend. Current best practices indicate that full inclusion with necessary supports and services brought to the student is both possible and an effective educational model (Halvorsen & Sailor, 1991; Schnorr, 1990; Stainback & Stainback, 1988).

Educators are beginning to focus on the role relationships play in educating the "whole child." Approaching students' learning according to domains such as social needs, communication needs, and academic needs frequently fragments their school experience. All aspects of a child's development are interdependent and must be integrated in order to be meaningful to the student. Douglas Biklen (1989) points out that "students' social and emotional well-being. . . cannnot be dissociated from academic achievement." In addition, Marsha Forest states, "Friendships and relationships are preconditions for learning in schools" (Forest, 1990).

The need for schools to focus on students' relationships as an important part of learning is being expressed by those advocating the restructuring of American schools. In the book, *Improving Schools from Within*, Roland Barth (1990) states, "What needs to be improved about schools is their culture, the quality of interpersonal relationships, and the nature and quality of learning experiences." Schools must become "caring communities." In fact, Elliot Eisner (1991) lists this as one of the six essential components of "what really counts" in schools.

Students with disabilities, their families, and their educators face challenges when pursuing friendship and belonging. In the past, students with and without disabilities have had few opportunities to learn together and get to know each other in regular classes or sometimes even in regular schools. The challenges are also related to how society has typically characterized people with disabilities as different and in need of special treatment. Children who are separated from their neighborhood and/or regular class communities for support services become isolated and "cast into roles of dependency and passivity," says Zana Lutfiyya of Syracuse University's Center on Human Policy. Even when physically present in their school and neighborhood communities, children are often "kept at a social distance from the other members of the community" (Lutfiyya, 1988).

A further challenge that arises when focusing on friendship is difficulty in finding the words to adequately express "the web of connections that sustain our lives," state John O'Brien and Connie Lyle O'Brien (1991). They go on to say, "People spontaneously acknowledge membership in culture, neighborhood, association, and family through signs and rituals that signal belonging and set common boundaries." Although friendship and belonging are difficult to describe and express, they are nevertheless critical subjects to address

Living with Paradox

At the heart of this friendship support issue lies a paradox. People sometimes feel hesitant about facilitating friendships because it seems unnatural and contrived. A contradiction exists between the inherent free-wheeling and elusive nature of friendship itself and the need to intentionally provide opportunities and support for positive relationships to develop among students with and without disabilities.

According to O'Brien and Lyle O'Brien (1991), "overcoming the social forces which push and pull people with disabilities out of community" calls for both "conscious effort" and "hard sustained work." Although friendships cannot and must not be forced, positive relationships need to be intentionally facilitated for students with and without disabilities to get beyond the barriers and grow to know, respect, and appreciate each other as individuals

Issues and Insights

Once the need for friendship support is acknowledged, other questions arise. How can friendships be facilitated without being forced or promoted as one-sided "helping relationships?" Who is responsible for facilitation? What qualities should individuals who provide friendship support possess? Are programs which are designed to improve students' social skills or to promote acceptance (like social development kits, peer tutoring programs, puppet shows, or "special friends" clubs) effective means for supporting true, reciprocal friendships? Are less formal, more individualized approaches more successful? What impact does the classroom "culture" or climate have on the success of friendship support efforts? Is there a difference in the support strategies most effective for boys and girls?

During 1991, the PEAK Integration Project has explored friendship issues that come into play when schools and communities begin to welcome students with disabilities in regular classes in their neighborhood schools. PEAK has gathered information by studying best practices, networking with parents and educators from the U.S. and Canada who are including and supporting students with challenging needs in regular education, and drawing from the personal experiences of the project staff, who are parents of children with disabilities and educators themselves.

Photo Courtesy of the Peak Parent Center

The most promising insights have come from the first-hand knowledge of parents and educators who have moved beyond asking why inclusion is important to focusing their full energy and commitment on how to make it work for real students in real classrooms.

Understanding "Process"

A common expectation among people who are beginning to include students with disabilities in regular education is for "quick fix" recipe-book answers to the questions, "How do you make it work?" and "How do you support friendships between students with and without disabilities?"

However, there are no prescribed answers that apply to all students and all situations, nor are there special programs which when implemented, can automatically meet all students' needs for friendship and belonging. Instead, success in including students and supporting the development of positive relationships is dependent on an individualized, dynamic process. This process requires concerted commitment and team planning efforts on behalf of each student. Challenges must be dealt with as they arise. O'Brien (personal communication, August 8, 1991) believes that team members must give themselves permission to say, "Here's what I see happening; now, what are we going to do about it?" This can be difficult for teachers, therapists, and others, who have traditionally seen their roles as delivering specific services rather than building and creating relationships.

What Are Some Qualities of Successful Facilitation?

Friendship facilitation has been defined as "providing opportunities where people can comfortably come together to meet each other..." (Lutfiyya, 1988). Lutfiyya divides the process of building connections between people with and without disabilities into three areas:

1. Facilitation—performing activities that help to bring people together;
2. Interpretation—presenting a person to others in a positive and enhancing way; and
3. Accommodation—the actual changes or adaptations in the physical environment that help to involve an individual in some way (Lutfiyya, 1991).

Since all three of these critical activities depend on team support and focus on the whole child, no one person can or should be responsible. The role is shared by all those involved with the student, including family members, regular educators, special educators, therapists, counselors, the student and his/her classmates, and other school and community people who know the student well and are committed to the student's long-term success and well-being. Connecting students is everyone's responsibility.

PEAK has identified some qualitites of individuals who provide successful friendship support:

- a strong belief that true, reciprocal friendships between students with and without disabilities are both possible and important for everyone;
- the willingness and ability to "invite" others to get to know a student with disabilities;
- an intuitive sense about the way friendships begin and flourish;
- the willingness to take on new roles;
- the ability to be innovative and to problem-solve;
- the commitment and energy to persevere and be open to creating new solutions when challenges arise;
- the ability to focus on and highlight people's strengths and capacities;
- the ability to accept and feel comfortable with being inobtrusive; knowing when to fade into the background so as not to get in the way of developing relationships.

Some techniques and suggestions from parents and educators for implementing friendship support are:

Building a support circle or "circle of friends" for an individual student. Forest and Lusthaus (1989) describe the "Circle of Friends" as "a network that allows for the genuine involvement of children in a friendship, caring, and support role with their peers."

Assigning a specific individual (sometimes called an "integration facilitator") to coordinate the inclusion of one student (Ruttiman & Forest, 1986). It is essential that this individual's role be determined carefully to ensure that she/he is not getting in the way of potential natural relationships and supports (Schaffner & Buswell, 1991; Vandercook & York, 1989).

Interacting with and representing the student with disabilities in a positive way. This is the most significant component of supporting friendships according to Deborah Quick, a regular fourth grade teacher from Syracuse, New York. Modeling by the adults in the school is a very subtle but powerful variable. "We are such influential role models for all of the kids," she says. "We, as teachers . . . , must consider everything we do and say carefully" (D. Quick, personal communication, May 18, 1991).

When a student's team is assigning needed friendship support roles, the task involves more than simply finding someone who is available. A regular education teacher whose class includes a student with significant challenges relates why she chose a particular woman, the energetic mother of three sons, from the available candidates for the job of supporting the student in her classroom. She states, "I knew she (the support person) would get him in the middle of whatever was going on in the classroom" (Price, 1991). This teacher's intuitive sense about the person's qualifications for the job communicates an important message about criteria for choosing support people.

A parent whose son has severe disabilities and is a fully participating member of his fifth grade class relates that the facilitator who supports her son introduces herself to others as "Mark's sidekick." "She doesn't present herself to staff or other kids as the expert directly responsible for Mark's 'program.' Her stance is that she's there to give him assistance—only when it's needed—so that he can participate actively and do what he wants and needs to do in fifth grade. She doesn't call the shots" (PEAK Parent Center, Inc., 1991).

Another important criteria is to choose people who "fit in well" with

Photo by Stegner Portraits ©

the students. Mark's mother goes on to share that his support person, Julie, is young and energetic, and the kids think she's "cool." Because of these qualities, Julie does not intrude upon the typical interactions and culture of students of that age. The planning teams for two high school students who have severe disabilities chose young women in their twenties to support the girls. The facilitators were able to relate naturally to the high school students and close "circles of friends" around each of the two girls quickly formed.

What are Challenges to Developing Reciprocal Friendships?

Some practices and attitudes, although well intentioned, may promote primarily one-sided, helping relationships or make the development of reciprocal relationships difficult. Schools have frequently used peer helping or peer tutoring programs in which students without disabilities help or "work with" students with disabilities as a primary vehicle for students to be involved with each other.

In the monograph, "Affectionate Bonds: What We Can Learn by Listening to Friends," Lutfiyya (1990) discusses society's tendency to view friendships between people with and without disabilities as being similar to traditional volunteer relationships. She believes that this tendency may arise from the perception that people with disabilities have "certain deficits and needs for assistance which outweigh the possibilities for reciprocal relationships." Lutfiyya further states, "Volunteers are viewed as contributing the most to the relationship by providing some kind of assistance. Although it is recognized that the helper receives some kind of intangible reward for her/his activity, volunteers are often given honorariums, plaques, and other forms of public recognition, course credits and other perks not viewed as acceptable within a friendship" (Lutfiyya, 1990).

Lutfiyya's concerns are echoed by parents and educators questioning the use of peer tutoring as a primary tool for developing reciprocal friendships. Students with disabilities might be less likely to be seen as contributors to relationships when their main involvement with typical students is in peer tutoring situations. The message to typical students when giving them school credit or rewards for becoming involved with students with disabilities may be that they are helpers and that the students with disabilities are primarily recipients of their help .

Final Thoughts

The friendship support issues discussed here require the attention and efforts of parents and educators concerned about ensuring students' long-term success and happiness. Friendships are "bottom line," crucial aspects of anyone's life.

Being a good "connector" of students with disabilities requires the ability to take the other person's part—to feel what that person feels as a result of living day to day with the challenges created by societal attitudes toward disability. Walking a mile in the shoes of students who have disabilities confirms the urgency with which friendship support efforts need to be pursued. Judith Snow (personal communication, December, 1989), Canadian advocate for people with disabilities, speaks from personal experience when she states, "The only disability is having no relationships."

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The Career Ladder Program Multi-district Outreach: *The Road to Success*

Shepherd Siegel, Ph.D.,
Program Director

Deborah Brians,
Program Coordinator

Photo by David Snyder

Inclusion can be justifiably hailed as a central concept underlying the spirit of the Americans with Disabilities Act (ADA) and the Individuals with Disabilities Education Act (IDEA). It is a concept that speaks to the noblest ideals of a society that offers universal opportunity and dedication to democratic principles. But it is only a concept, not a reality, and its legislation—as the leaders of past civil rights struggles will attest—lags behind actual practice.

For full inclusion to become a reality, laws must effectively influence regulations and policies, which, in turn, should be respected and observed. But more importantly are the attitudes and beliefs of the citizens entrusted with the conduct of business. Those decisions made in the normal course of daily life can make the difference between inclusion or segregation, between a meaningful life in the mainstream or purposelessness on the margins of society. In the world of work, legislating the full inclusion of persons with disabilities is not enough. Educators, employers, families, and adult service providers need principles to guide them as they attempt to make real change at the community level.

These socially liberating principles can be conceived as the making of a context in which the change can occur, the delivery of services within that context, and the empowerment of the individuals who are served with tools that ultimately set them free of the need for social services. When approached in this fashion, service providers can correctly see themselves

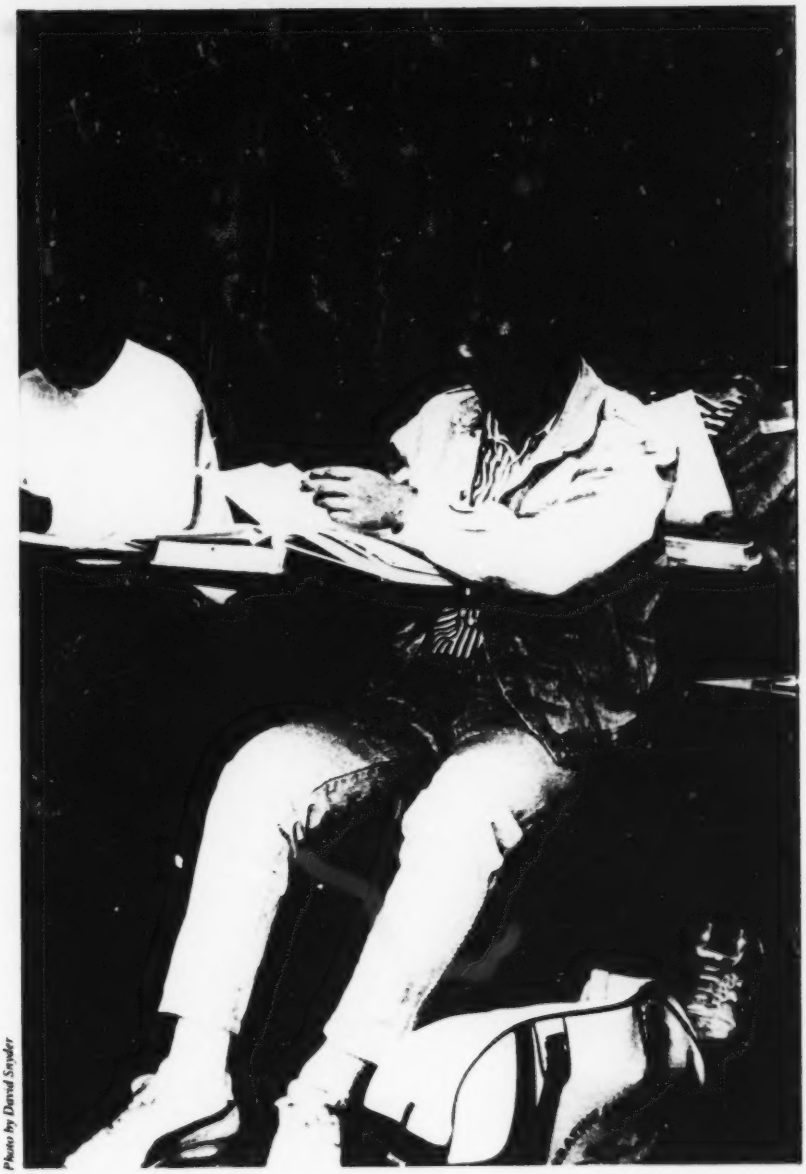

Photo by David Snyder

as facilitators, rather than makers, of change. In a vocational setting, such facilitation requires that responsibility is shared by the employer, the employee with the disability, co-workers, family members, and friends.

A Record of Success

From 1985 to 1990, the Career Ladder Program (CLP) served youths with mild disabilities who were exiting San Francisco's public schools. The program was funded as a model demonstration program with a grant from OSERS' Office of Special Education Programs. With the support of the San Francisco Unified School District (SFUSD) and the California State Department of Rehabilitation, service delivery was blended to form a program that "ushered" a youth from school to adult life in a more personalized fashion.

Beginning with the cooperation of the California State Automobile Association (an insurance company with over 1600 employees in its San Francisco offices), youth interns were able to participate in a supervised work experience in which 6 to 16 interns were dispersed throughout the company four afternoons a week. SFUSD provided an instructor to teach and monitor. This concept, originally developed by Robert Gaylord-Ross, was dubbed a community classroom (Gaylord-Ross, Forte, & Gaylord-Ross, 1986). On the fifth afternoon, the interns came together in a classroom setting to participate in an Employment Skills Workshop, a weekly seminar intended to improve the job and social skills of the interns, discuss the experience of going to work, and develop the beginnings of peer support relationships. Finally, when the youths exited high school, a CLP Transition Specialist would provide ongoing availability of an eclectic array of services shaped to the diverse adult needs of this special population. Vocational rehabilitation services were delivered as a subset of CLP Transition Services.

At the completion of the project in 1990, 127 youths had been served. Four other organizations—the University of California Medical Center, Marriott Food Services, Photo & Sound Company, and St. Luke's Hospital—sponsored community classrooms. The project was adopted by the local school and rehabilitation districts, and currently functions as part of California's Transition Partnership Project (TPP).

Principles Underlying Success

At the very heart of the Career Ladder Program lies the concept of facilitating movement from less participation in mainstream society to more participation in mainstream society. Employment is only one component of

a successful transition that has as its goal the greater participation and citizenship of these youths. In this context, the Transition Specialist engages youths in a meaningful relationship and develops common goals with them to bring more power, meaning, participation, and responsibility into their lives. Employment and postsecondary education alone are insufficient motivators. In order to achieve maximum success in guiding youth to greater independence and citizenship, the Career Ladder Program has as its overarching principle that *services provided are shaped by the needs of the youths served.* This is a deceptively simple statement. At first glance it seems an obvious credo for any social service. But years of institutionalization and quota-based programs have forced educators and adult service providers to distribute services among unrealistically high numbers of youths, to limit their services to the narrowly stated mission of their agency, or to serve a large number in a limited time. This may result in the loss of those youths who are likely to succeed, but require more time. "Creaming" becomes a systemic necessity: we can only serve those whose needs can be served within our time frame; we can only deliver a limited service. Thus, services are typically shaped by the needs of the system, not the population to be served. CLP challenges this notion and encourages service providers to take the time to listen to the people who come to them for help.

Although CLP services are directed primarily towards successful vocational adjustment, they also deal with non-vocational areas such as emotional, cultural, economic, and social issues. When entering into relationships with special needs youths, the Transition Specialist should be prepared to provide support in these other areas or the transition process may be impeded.

There are two sets of three principles underlying CLP that address delivery of vocational transition services: each set comprises a context, a service, and a tool. The context is the setting that must be engineered to best deliver the service. The service is the practice of the educator, aimed at providing tools. The tool is the activity that enables the participants to "own" the program for themselves and to uphold its principles without the aid or cost of service providers. The first set of three principles applies to school-

sponsored services during the last year or two of secondary school. The second set emphasizes services to youths who have most recently exited the public school system.

CONTEXT (Principle 1):

Individually tailored responses to personality and learning styles. A service provider can make significant impact on rates of success only by respecting each youth's individual needs and by offering an individualized program to address them. Inherent in this principle is the ability to challenge and not underrate the potential of the youth. Youths feel useful, gain meaningfulness, self-esteem, competence, and employability when the program makes reasonable demands of them. This means that job placement requires more than job development and occasional monitoring. Supported employment techniques must be used to ensure that there is challenge, learning, efficiency, and competency. In the actual delivery of on-the-job support, interns will perform better when systematic and data-based instructional methods are used to devise means for improving job performance. Writing objectives, using an array of behavioral interventions, self-monitoring, and social skills training are all good examples of this approach. Counseling, personal interviews, and team building are other approaches to achieving an effective rapport with youth and individualizing the approach.

SERVICE (Principle 2):

Employment skills. The skills most critical to developing a good employment record are attendance, social skills, employer-pleasing behaviors, job skills, and job search skills. These can be taught through the systematic address of objectives, social skills training, counseling, job skills training, and job search skills training. Youths need training in employment skills to develop careers. In the CLP model, employment skills are taught in a coordinated effort between the workplace and a weekly Employment Skills Workshop. Interns learn skills that enable them to have successful careers when behaviors taught in the workshop are translated to the job. When these skills are translated into curriculum goals, however, there is a risk of losing students. To avoid this, youths must "own" the curriculum goals. This will happen when the curriculum utilizes a process approach (Trower, 1982) and integrates self-monitoring, cooperative learning, and peer counseling methods and principles. The educator's role is to facilitate this "ownership process" and give quality feedback to the youths.

TOOL (Principle 3):

Family involvement. People do not live in isolation. A family that supports success for its members can empower troubled youths to mature and succeed. A family that offers no support can sabotage the clients ability to achieve success and waste the efforts of the service provider. Families share in the responsibility for the careers of their children, and can be key players when they participate in the mandatory pre-program meeting. In instances where family is not available, other key players must be engaged. Sometimes a school counselor can fulfill this function; sometimes a boyfriend or girlfriend will be an appropriate choice. Ultimately, peer support can take over this "natural support" function.

CONTEXT (Principle 4):

Ongoing availability of services. Some special needs youths may require a longer time to develop trust. Continuing availability of services makes plain an open-ended commitment, allowing the youths to take the needed amount of time to develop the attachments that will ultimately benefit their career development. Some may need to use this service only once after their high school graduation; some demonstrate an intermittent need for services as, spurred by job successes, they desire further training and/or the education and guidance needed to locate a better job. A small percentage of youths have such profound special needs that they require lifelong services. But knowing that support is never more than a phone call away instills the necessary confidence in many to pursue a career.

SERVICE (Principle 5):

Benefactor relationships. Youths need to feel accepted by their benefactors (Edgerton, 1967) whose opinions they value. The benefactor must be able to marshal the technical resources for engineering vocational opportunity and development, and serve as counselor to help develop long-term authentic and committed interpersonal relationships with program graduates.

The benefactor never disqualifies a youth and always fulfills the promise of continuing availability of services. Graduates will keep their jobs and receive follow-up services offered by one or two individuals with whom they have a positive peer relationship.

TOOL (Principle 6):

Membership in a legitimate group. Youths need the reassurance of being part of a group of people who are engaged in a similar struggle to become adults. Competitive employment is not only the application of learned skills, but also a maturing process, the success of which depends on a melding of affective and vocational education. In a peer group situation, they are more likely to act on socially beneficial decisions made with peers and subsequently reduce their reliance on the social delivery system. This is the ultimate "natural support" system, comprising not only co-workers and family but also peers. Yet all of the curricular and vocational goals of the program will be met more satisfactorily when the program includes time for the interns to develop meaningful relationships with each other.

Data show that CLP graduates experience an above-average level of success in employment situations fol-

lowing high school graduation. The level of employment and postsecondary school enrollment rates demonstrates a positive correlation with the level of community integration. The community in turn is enhanced by the cohorts of otherwise marginal citizens.

Documenting and Sharing Success

It is useful for us to ask ourselves why we should provide services to increase the participation of youths in our society. Our role as educators is to endow our students with citizenship, and in a democracy, citizenship can be measured by the level of participation that individuals exercise. A career is a fairly dependable indicator of participation. Thus, youths need careers to develop a sense of identity and positive self esteem, and to gain the economic power necessary to achieve the full measure of citizenship. Services provided at the critical juncture between high school and post-high school life will undoubtedly have a significant effect on the client-citizens' adult lives.

Five years after the initiation of the Career Ladder Program, over 90 percent of its participants are employed, receiving additional postsecondary training, or a combination of the two[1] (Siegel, Avoke, Paul, Robert, & Gaylord-Ross, 1991; Siegel, Robert, Waxman & Gaylord-Ross, in press). Their peers across the nation are employed at approximately a 50 percent rate, and remain in school at a 15 percent rate (Wagner & Shaver, 1989). The remaining 8 percent are more challenging individuals, and their progress depends partly upon the severity of their disability and partly on acceptance by our society.

The components-from-principles approach of the Career Ladder Program will be made available to other communities in print and in practice. In the Spring, *Pro-Ed* Magazine will publish *Career Ladders for Challenged Youth in Transition from School to Adult Life*. (Siegel, Robert, Greener, Meyer, Halloran, & Gaylord-Ross, in press), addressing the six principles in more depth, and offering essays (principles) and a handbook (components) for replication of the model.

The Office of Special Education and Rehabilitative Services' Office of Special Education Programs has funded a three-year multi-district outreach grant to the Career Ladder Program team. The Career Ladder Program staff is now in the process of developing an approach that is sensitive to the needs and concerns of each school district, community, and adult service provider. Participating communities will receive an assessment, enter into consulting agreements, receive training, contract to make systems change, and then receive follow-up visits to adapt and analyze their level of success. For additional information on the Career Ladder Program, please contact Ms. Deborah Brians at 890 Buena Vista Road, Hollister, CA 95023.

[1] 80% employed, 27% in school, = 68% employed, 15% in school, and 12% engaged in both.

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Project Interact:
Interventions for Social Integration of Young Hearing-Impaired Children

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Photo by David Snider

One of the underlying purposes behind mainstreaming children with disabilities is that significant social benefits accrue when they are placed in an educational setting with non-disabled children. Young children, in particular, benefit from integrated programs because both groups (disabled and non-disabled) learn from being together during the years when their attitudes and perceptions of themselves and others are most pliable (Klein, 1975). Research has shown that merely placing children in the same physical environment without specific intervention, does not necessarily lead to social interaction or social acceptance between children with disabilities and non-disabled children (Antia, 1982; Jenkins, Speltz, & Odom, 1985; Odom & McEvoy, 1988; Peck & Cooke, 1983; Peterson & Haralick, 1977). On the other hand, intervention programs that coach children with disabilities in social skills or teach them to initiate and respond to peers' social contacts, promote positive peer interaction (Odom, Hoyson, Jamieson, & Strain, 1985; Shafer, Egel, & Neef, 1984). Participation in joint activities may also result in peer acceptance and interaction between children with disabilities and non-disabled children (Ballard, Corman, Gottlieb, & Kaufman, 1977).

In the case of children who are hearing-impaired, the literature indicates

Photo by David Snyder

that social integration is as elusive a goal as it is with children who have other disabilities. When hearing and hearing-impaired children are placed in the same environment, there is a strong tendency towards self segregation. Arnold and Tremblay (1979) examined the social interaction between young hearing children and children with hearing impairments who were enrolled in an integrated preschool program. They found that the hearing children approached, vocalized, played, and engaged in physical contact with other hearing children significantly more often than with children who were hearing-impaired. Similar tendencies toward self segregation were also seen by Levy-Shiff and Hoffman (1985) who observed the interactive behaviors of oral hearing-impaired preschool children and their hearing classmates during free play sessions. Their results indicated that both the hearing-impaired and hearing children preferred to initiate, converse, and positively respond to partners whose hearing status matched their own.

Few intervention programs have been developed to increase positive social interaction between young children with hearing impairments and their hearing or hearing-impaired peers. Soderhan and Whiren (1985) were able to increase positive interaction between a four-year-old, moderately hearing-impaired child in an integrated preschool setting by reducing the frequency of adult-child interaction. Vandell, Anderson, Erhardt, and Wilson (1982) attempted to modify hearing children's interactions with children who were hearing-impaired by engaging the hearing children in a variety of activities designed to provide them with knowledge about hearing loss and practice in using appropriate communication when interacting with children who were hearing impaired. Unfortunately, post-intervention measures indicated that the children with hearing impairments interacted less frequently and for shorter durations with hearing children who received the intervention than with hearing children who did not receive the intervention.

As with other children who have disabilities, it has been hypothesized that teaching social skills to children who are hearing impaired will increase their interaction with peers. Barton and Osborne (1978) were able to increase physical sharing among preschoolers who were hearing impaired through the use of teacher modeling and prompting. A social skills intervention program developed by Antia and Kreimeyer (1985) was successful in increasing both linguistic and non-linguistic positive peer interaction among hearing-impaired preschool children (Antia & Kreimeyer, 1987, 1988; Kreimeyer & Antia, 1988). There are as yet no data

available to indicate that a social skills intervention can successfully increase positive interaction between children who are hearing impaired and their hearing peers. Also, there are no data to indicate whether increases in interaction will result in concomitant increases in social acceptance of children with hearing impairments by their hearing peers.

The purpose of this research was to examine the effectiveness of two intervention programs, a social skills intervention and an integrated activities intervention, on the social interaction and social acceptance between young children with hearing impairments and their hearing peers. Two studies were completed between 1988 and 1991. Study 1 examined the effects of the two intervention programs on the peer social interaction of children with hearing impairments and hearing peers who participated in the intervention. Study 2 examined the effects of intervention on peer interaction and peer acceptance between children with hearing impairments, hearing peers who participated in the intervention (trained hearing peers), and hearing peers who did not participate in the intervention (untrained hearing peers).

Methods

Subjects

One hundred and five hearing-impaired and hearing children between the ages of four and seven years participated in Study 1. Twenty-five hearing-impaired and 26 hearing children received the social skills intervention, and 24 hearing-impaired and 30 hearing children received the integrated activities intervention. One hundred and thirty-six children (who had not participated in Study 1) between the ages of four and six years participated in Study 2. Twenty-five hearing-impaired and 27 hearing children received the social skills intervention, and 20 hearing-impaired and 21 hearing children received the integrated activities intervention. In addition 43 hearing children participated in Study 2 as untrained peers. The children were drawn from 20 educational programs in seven states.

Information on unaided and aided pure tone averages in the better ear of the children with hearing impairments was obtained from school records. A speech intelligibility score for each child with hearing impairment was obtained from an audiotaped speech sample that was rated by trained listeners using the NTID Speech Intelligibility Scale, in which a rating of one is assigned to completely unintelligible speech, and a rating of five is assigned to completely intelligible speech (Subtelny, Orlando, Whitehead, 1981). Each classroom teacher completed the Communication and Social Maturity subdomains of the Classroom Edition of the Vineland Adaptive Behavior Scale (Sparrow, Balla, & Cichetti, 1985) for the hearing and hearing-impaired children in her class. Subject data is provided in Table 1.

Intervention Programs

In both studies the social skills and the integrated activities interventions were conducted with groups of four to eight children of whom two to four were hearing impaired and the remainder were hearing. These small groups participated in the intervention for twenty minutes a day, two or three days a week for an average of 37 intervention sessions. The intervention was conducted by the teacher of the hearing impaired and/or the regular classroom teacher, in either the special education classroom, the regular classroom, or another space provided by the school.

Social Skills Intervention. The purpose of the Social Skills intervention was to teach participating hearing and children with hearing impairments the social skills of greeting, sharing, cooperation, assisting, complimenting, and inviting. These social skills were modeled and prompted by teachers during arts and crafts, cooperative games, and dramatic play activities that were designed to provide children multiple opportunities to interact with peers while using the skills. Teacher modeling and prompting of social skills was gradually withdrawn towards the end of the intervention.

Integrated Activities Intervention. The purpose of the Integrated Activities intervention was to provide opportunities for children to become familiar with a small and stable group of peers. Children were seated together and participated jointly in a variety of teacher planned activities or free play activities that provided them the opportunity to interact with each other. No modeling or prompting of social skills occurred during this intervention.

The researchers traveled to each participating site and trained the teachers to conduct the Social Skills or Integrated Activities intervention using manuals, videotapes, and prepared lesson plans. During the course of the intervention, the teachers sent periodic videotapes of the intervention sessions to the researchers for written feedback.

Data Collection

Social interaction. Social interaction data were obtained four times during Study 1 and three times during Study 2. During Study 1, data were collected immediately prior to the intervention (Time 1), midway through the intervention (Time 2), immediately after the intervention ceased (Time 3), and two to four weeks after the intervention ceased (Time 4). For Study 2, data were collected prior to the intervention (Time 1), immediately after the intervention ceased (Time 2), and again four to six weeks after the intervention ceased (Time 3). At each data collection time, children were videotaped during two or three separate 20 minute free play sessions. These videotapes were mailed to the researchers and coded for frequency of

Subject Description

	Study 1				Study 2					
	Social Skills Group		Integrated Activities Group		Social Skills Group		Integrated Activities Group			
No. of Children	Hearing (N=25)	H-Imp (N=26)	Hearing (N=24)	H-Imp (N=30)	Trained Hearing (N=27)	Untrained Hearing (N=24)	H-Imp (N=25)	Trained Hearing (N=21)	Untrained Hearing (N=19)	H-Imp (N=20)
Chronological Age (years-month)	5–6	5–3	5–7	5–5	5–3	5–1	5–3	5–4	5–3	5–2
Vineland Communication Score	100	83	101	77	107	104	82	105	107	78
Vineland Social Score	103	90	102	82	107	101	88	106	113	85
Unaided Hearing Loss (Pure tone average in dB)	—	92	—	74	—	—	87	—	—	74
Aided Hearing Loss (Pure tone average in dB)	—	53	—	40	—	—	41	—	—	39
Speech Intelligibility (1=unintelligible 5=intelligible)	—	2.5	—	3.3	—	—	2.1	—	—	2.8

social interaction. In Study 1 the free play group consisted only of the hearing and hearing-impaired children who were participating in the intervention. In Study 2 the free play group consisted of the children with hearing impairments, the trained hearing peers (who participated in the intervention) and the untrained hearing peers (who did not participate in the intervention). During each free play session the video camera sequentially followed the children until 8–9 minutes of videotape were obtained on each child. For Study 1 the camera followed all participating hearing and hearing-impaired children, but for Study 2 the camera followed only the children with hearing impairments. The videotapes were analyzed using a 5-second interval sampling technique that recorded positive and negative, linguistic and nonlinguistic peer interaction, and also recorded the peer with whom the child was interacting.

Social acceptance. Social acceptance data were obtained for all children in Study 2 at approximately the same time as the social interaction data. The Social Acceptance Scale was administered individually to each child. A child was shown photographs of each child in the play group (the hearing-impaired, trained hearing, and untrained hearing children) and was asked whether she/he knew the child and then whether she/he liked to play with the child a lot, a little, or not at all. Every child received a recognition score (1 for recognition, 0 for non-recognition) and a social acceptance score (3 for play a lot, 2 for play a little, and 1 for play not at all) from each child in their play group.

Results

Study 1

Social Interaction

The proportion of observed intervals in which positive peer interaction occurred with hearing-impaired peers for hearing children and with hearing peers for hearing-impaired children was obtained and analyzed using a Repeated Measures Analysis of Covariance: the between subjects factor (2) was Treatment (social skills intervention or integrated activities intervention), with Time (3) as the repeated measure. Although data collection was scheduled four times during the study, several schools were not able to collect data during the fourth time. For this reason data for Time 4 were obtained on only 68 of the 105 partici-

Photo by David Snyder

pating children. The Time 4 data, therefore, were not used in the statistical analysis but are included for descriptive purposes only. Chronological age, and the Vineland Social and Communication scores were the covariates. The proportion of negative interactions for all children was less than 0.1 throughout the study; these interactions were, therefore, not subjected to any further analyses.

Study 2

Social Interaction

Social interaction data were analyzed using a Repeated Measures Analysis of Covariance: the within subjects factor was peer status (hearing-impaired peer, trained hearing peer, or untrained hearing peer); the between subjects factor (2) was Treatment (social skills intervention or integrated activities intervention), with Time (3) as the repeated measure. Aided hearing loss, speech intelligibility, and the Vineland Social and Communication scores were the covariates. A significant Group X Peer status X Time interaction was found $F(4,168)=2.63$, $p<.05$. Post hoc comparisons indicated that children with hearing impairments in the social skills group significantly increased their positive interaction with hearing-impaired peers from pre-intervention to post-intervention and maintained this increase for 4-6 weeks after the intervention ceased. Children with hearing impairments in the integrated activities group did not make any significant gains in interaction with hearing-impaired or hearing peers.

Social Acceptance

Recognition scores. A mean recognition score from trained and untrained hearing peers was computed for each child with a hearing impairment by summing the number of peers who recognized the child and dividing this sum

Social Acceptance Scores of Hearing-Impaired, Trained Hearing, and Untrained Hearing Children: Study 2

	Social Skills Group				Integrated Activities Group			
	From Trained Hearing Peers		From Untrained Hearing Peers		From Trained Hearing Peers		From Untrained Hearing Peers	
	Mean	(SD)	Mean	(SD)	Mean	(SD)	Mean	(SD)
Hearing Impaired Children	2.1	(.37)	1.9	(.37)	2.0	(.41)	2.3	(.35)
Trained Hearing Children	2.3	(.43)	2.4	(.30)	2.4	(.57)	2.4	(.33)
Untrained Hearing Children	2.3	(.40)	2.4	(.35)	2.2	(.45)	2.5	(.38)

by the number of peers rating the child. Both the social skills and the integrated activities groups showed similar recognition patterns. Prior to the intervention, at Time 1, hearing-impaired children received similar recognition scores from their trained and untrained hearing peers (means=.68,.53 respectively). After the intervention, at Time 2, the children with hearing impairments received higher recognition scores from their trained hearing peers (.94) than from untrained peers (.52). These scores indicate that there was no change from pre- to post-intervention in the recognition scores given to children with hearing impairments from their untrained peers.

Acceptance scores. Each hearing and hearing-impaired child received an acceptance score of 1 (not like to play with at all), 2 (like to play with a little), or 3 (like to play with a lot) from each peer within their play group. These scores were summed and divided by the number of peer raters to yield a mean social acceptance score. These data were analyzed using a repeated measures Analysis of Variance with peer status (2) as the within subjects factor (scores obtained from trained hearing peers and untrained hearing peers); Group (2) as the between subjects factor; and Time (3) as the repeated measure. Scores obtained from children with hearing impairments were not included in the analyses because of their extreme unreliability. A significant Group X Hearing Status X Peer Status interaction effect was found; $F(2,106)=5.08$, $p<.01$. The lack of a Time effect indicated that no significant changes in acceptance scores for hearing or hearing-impaired children occurred between the pre-test and post-test, or between the post-test and the follow-up test for either intervention group. Post hoc analyses indicated that there were no significant differences in acceptance scores obtained by the children with hearing impairments from trained or untrained hearing peers in either group; nor were there any significant differences in the acceptance scores obtained by hearing-impaired, trained hearing, and untrained hearing children. Table 2 shows the means and standard deviations of the acceptance scores, collapsed across time, for the three groups of children.

Discussion and Implications

Interaction between Children with Hearing Impairments and Hearing Peers

In both studies, the Integrated Activities program and the Social Skills program resulted in a small, but steady, increase in interaction between the hearing children and the children with hearing impairments who participated in the intervention. The Study 2 data indicated that interaction between children with hearing impairments and untrained hearing peers did not increase. Thus, one conclusion is that regular intensive contact with a stable group of peers, a condition common to both interventions, may be the key factor in increasing interaction. Although the increases in interaction between children with hearing impairments and their trained hearing peers were small, the steady upward trend during the intervention is encouraging. It is possible that long term intensive contact with the same group of peers may result in increased interaction between children with hearing impairments and hearing children. Linguistic

interaction between hearing children and children with hearing impairments constituted only a small proportion of total interaction and did not show the pattern of steady increase evident in non-linguistic interaction.

Social Recognition and Acceptance

The large increase in recognition scores obtained by children with hearing impairments from trained peers, compared to the lack of increase from untrained peers, indicates that familiarity is the key to recognition between the hearing and hearing-impaired children. It is logical to assume that recognition is a necessary, but not sufficient, condition for interaction and acceptance. Increases in recognition scores were not accompanied by increases in social acceptance scores. It should be noted that although children with hearing impairments were not the preferred playmates of the hearing children, neither were they rejected by them. The children with hearing impairments typically were rated by their hearing peers as children with whom they would like to play with "a little." It should be noted, however, that although the differences between acceptance scores of hearing and hearing-impaired children were not significant, children with hearing impairments obtained lower scores than did the hearing children.

To conclude, it appears that an intervention that allows children to interact frequently with a small, stable group of peers is likely to lead to some increase in interaction between hearing children and children with hearing impairments. Unfortunately most mainstreamed children who have hearing impairments are placed in classes with twenty or more hearing children. Furthermore, they may be integrated with different groups of hearing children for different classes and consequently not have the opportunity to interact regularly with the same group of children. If children with hearing impairments are to be socially integrated, if they are to interact with and be accepted by their hearing peers, it may be necessary to change mainstreaming practices, to provide extended opportunities for small group interaction.

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Why Are These People Working?

Photo by Bob Chamberlain

Frank Simpson, Director

Helen Keller Services For The Blind

Date Line: March 1989

"To maximize the independence of people who are blind, blind multihandicapped, and deaf-blind" is the mission of Helen Keller Services for the Blind (HKSB). This private nonprofit agency, founded in 1893, annually provides services to over 3000 individuals who are blind in communities throughout Nassau, Suffolk, Queens, and Kings (Brooklyn) Counties in New York. The network of rehabilitation, social, medical, and educational services varies significantly from one location to the next. As a result, HKSB staff are involved with varied agencies and programs of services dependent on individual client place of residence and needs. The complex social and economic issues of inner city Brooklyn neighborhoods, rural Suffolk County communities, and suburban Queens and Nassau locations significantly impact on the delivery of rehabilitation and social services. As these blind individuals' employment needs, their neighborhoods, their families, and their experiences became

more complex, the options available through HKSB and the state rehabilitation system became inadequate. For working age adults in 1989, HKSB was providing day treatment services to people who were blind and multiply disabled and sheltered workshop placement for people who were blind, many of whom also had additional disabilities. Time limited vocational training and job placements for other individuals were available through the New York State Commission for the Blind and Visually Handicapped. This could include short-term job coaching, on the job training, or supervised work experience *but no long term* (extended) *support* was available once the state vocational funding finished and the case was closed. Permanent long-term support (both intermittent and regular) was a missing element for the following groups of individuals:

1. ***Employees*** (many developmentally disabled) from the sheltered workshop seeking integrated community employment who had internalized the "culture of the HKSB Sheltered Workshop";
2. ***Referrals*** who are multi-disabled-blind with no work history, undetermined vocational goals, challenging behavior, limited or no training, and previous ineligibility for time-limited state sponsored vocational rehabilitation services;
3. ***Clients/trainees*** (with competence in job skills) who have limiting life experiences resulting in social immaturity and emotional dependency. This level of social and emotional interaction results in repeated failure in acquiring and maintaining a job; and
4. ***Clients/trainees*** who are technology dependent when placed on a job and require long-term intermittent technical assistance.

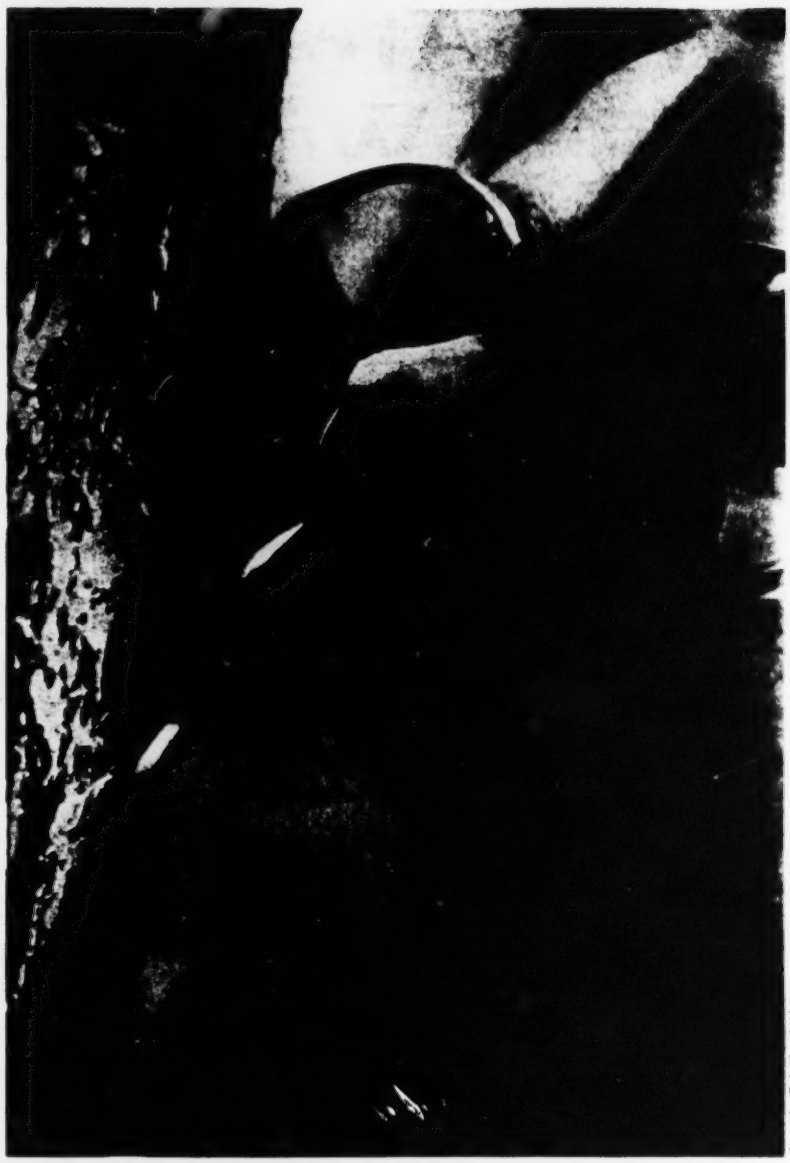

Photo by Bob Chamberlain

Date Line: March 1992

Margaret, age fifty, has been employed in her current restaurant job since September 1990. Prior to this job she started out in another restaurant for five months but changed to be nearer her group home. Margaret reportedly had a history of frequent emotional outbursts at work and in the group home where she lives. Since her supported employment placements, her behavior has markedly improved. She had been employed in a sheltered workshop for fourteen years. She is legally blind and developmentally disabled. She likes her days well organized and predictable. She travels to work independently and takes care of her own medication. She likes getting to work very early and enjoys her co-workers. Margaret is currently earning a wage of $4.25 per hour.

Robert, age thirty-nine, is currently working as an indoor maintenance helper assisting with on-going repairs and substituting for other workers who are on vacation. The repairs include frequently replacing florescent lights

throughout a six-story building. Prior to this job, Robert was employed in a sheltered workshop for twelve and a half years. He happens to be profoundly deaf and legally blind. While he has been at this maintenance job since November 1989, he will soon be working with his employment training specialist to find a job closer to his residence. Robert is currently earning a wage of $5.30 per hour.

Aaron, age thirty-seven, recently became employed 21 hours per week as a stock clerk in a drug store. He was laid off from a sheltered workshop for the blind in March 1991 after twelve and a half years on the job. He and his employment training specialist had been working since October 1991 to find Aaron a new job. Aaron is legally blind and developmentally disabled. He is currently earning a wage of $4.45 per hour.

Gloria, age 23, has been working in her cafeteria job since August 1990. Since the cafeteria changed management, she has been working with a job coach to learn the new system. She has held other jobs since starting with the supported employment program. In each job, she has learned more about what she needs to be successful at work. Gloria has hearing, vision, cardiac, and orthopedic disabilities and is also developmentally disabled. She is currently earning a wage of $7.25 per hour.

Margaret, Robert, Aaron, and Gloria are representative of the fifty-four individuals who are currently receiving supported employment services from job coaches, employment training specialists, and other staff at Helen Keller Services for the Blind.

Of these individuals only one was working in competitive integrated

Photo by David Newton

Geographic Distribution:

22 live in an urban setting;
17 live in a suburban setting; and
15 live in a rural setting.

Living Arrangements:

12 live independently;
35 live within extended family;
6 live in group homes; and
1 lives in a supported apartment.

Travel Arrangements:

44 can travel to work independently, and
10 can travel to work with assistance.

Of the 32 in intensive or extended supported employment situations, the types of jobs are:

10 Clerical/Office work
1 Food Services
3 Stock Clerk/Warehouse
1 Telemarketing
5 Maintenance/ Housekeeping
2 Teachers Aid

The primary disability of the fifty-four individuals involved in supported employment is: (All individuals have an additional disabling condition.)

43 Legally blind or totally blind.
11 Developmentally disabled.
6 Clients who worked but chose to stop working and have since left the program.
1 Client who continues working but refuses support.
9 Clients who decided to leave the program prior to placement.

community employment in March of 1989. Currently, thirty-two are working in competitive employment situations and nine are in their second jobs. Twenty-two people are actively seeking their first job placements. The total number of job placements is forty-eight.

Supported Employment Services: Individual Placement Model

For clients to succeed in supported employment placements, the team approach is crucial to the provision of integrated services. The composition of the team includes the client, the job development/placement specialist, the employment training specialist, the CBVH counselor, a family member, as well as other professionals providing necessary ancillary support services such as low vision, travel training, or rehabilitation teaching. Each of the team members has specific responsibilities which, at times, may overlap. The participation of the client is fundamental to formulating realistic individualized rehabilitation plans with specific goals clearly defined. Individualized rehabilitation plans are revised and modified as an on-going activity.

The situational assessment, a major job development and on-site assessment strategy, entails a minimum two-day period in which a client, assisted by an employment training specialist, volunteers his services to a prospective employer. The situational assessment provides both the client and employer an opportunity to assess whether employment is feasible and to determine what is the most appropriate job coaching approach for the client in the work setting. Job site development is the on-going responsibility of the employment training specialist and job development/placement specialist who continually explore job opportunities that match clients interests, talents, and skills.

The employment training specialist is the major avenue for providing on-going support. During the scheduled visits to the job site, he/she conducts interviews with the client, the employer, and co-workers. The purpose of these meetings is to assess client performance, to offer recommendations, to reinforce positive performance, and to establish and maintain a meaningful working relationship among all parties.

1. A Job Club was established in Brooklyn in December 1990 and on Long Island in September 1991. The purpose of the Job Club is to serve as support for clients who want to work, but have never worked outside of a sheltered setting. Meetings are scheduled on a monthly basis.

2. Project staff participate in on-going teleconferences with the Commission for the Blind and Visually Handicapped (CBVH) and Rehabilitation Services Administration (RSA) funded projects.

3. Supported employment staff participated with HKSB administrative staff in closing a large agency-operated sheltered workshop that employed sixty-four people with visual impairments (many with additional disabilities). Many of these former sheltered workshop clients are candidates for supported employment.

Supported Employement Staff

HKSB has utilized extensive agency and community resources to orient and train supported employment staff by developing a curriculum to train the staff in task analysis, job coaching techniques, the placement process, how to identify natural supports in the work place, and supported employment practices. Inservice training includes lectures, discussions, and blindfold experiences for new staff to understand the special needs of persons who are blind. For example, (a) the low vision clinic has provided training on blindness, eye disorders, and the use of residual vision; (b) social services has presented an overview of adjustment to blindness, and how to advocate for visually impaired and blind clients; (c) rehabilitation teachers have given training on issues related to activities of daily living and accommodations for people who are blind; (d) orientation and mobility instructors demonstrate techniques on how to orient a person who is blind to the job site and how to impart travel skills. HKSB has three levels of staff to provide supported employment: (1) the Job Coach, (2) the Employment Training Specialist, and (3) the Job Development/Placement Specialist.

Summary

The individuals described and the employment data presented are a direct result of the supported employment services developed beginning in 1989. These individuals needed to work and wanted to work. The new components of intensive training at the job site and availability of on-going, extended support made integrated community-based employment a reality. The intensive supported employment services are funded through the United States Department of Education's Office of Special Education and Rehabilitative Services; New York State Department of Social Services—Commission for the Blind and Visually Handicapped (CBVH), and the New York Department of Education—Office of Vocational and Education Services for Individuals with Disabilities (VESID). The extended (follow along) services are sponsored with state funds from VESID and New York State Office of Mental Retardation and Developmental Disabilities (OMRDD). Individuals currently in supported employment are developing not only new skills but new goals and aspirations. This challenges the staff to continually develop new options requiring extensive job development. In the past, the concept "once placed, placed permanently" is simply no longer valid if this growth and change is to continue.

Thresholds Theater Arts Program

Photo by Thresholds

Photo by Thresholds

Judith A. Cook, Ph.D., Director

Thresholds National Research and Training Center on Rehabilitation and Mental Illness

The Thresholds National Research and Training Center on Rehabilitation and Mental Illness and a group of theater companies in Chicago are conducting a joint venture that uses the theater community to provide meaningful vocational opportunities to persons with long-term mental illness. Funded by OSERS' Rehabilitation Services Administration the Theater Arts Project (TAP) has three main objectives. First, the program provides jobs in theater companies for persons with severe mental illness. These jobs include office work, set construction, public relations activities, theater maintenance, and costume design. Second, selected theater professionals

participate in theater arts apprenticeships in which they act as mentors to clients by teaching specific job skills in their own theaters. This includes the creation and implementation of an Apprenticeship Contract that is facilitated and monitored by project staff. Third, this program enriches the artistic spirit and knowledge base of clients through their participation in theater workshops and acting classes alongside non-disabled peers.

Establishment of Jobs in Theater Settings

Thus far, the project has successfully recruited twelve theaters to act as employers. The census of theaters involved with the project has grown significantly since its inception. Word of the program spread quickly throughout the theater community in Chicago. Many theater companies learned from their peers about the work Thresholds clients were doing and contacted project staff to discuss how their theaters could be involved. As time passed, relationships with the theater community became more numerous and had more "history." As a result, project staff developed insider knowledge of which theaters would be mounting productions, when, and how many people they might need to hire. After two years of operation, a total of 42 project clients have been employed in a Chicago theater. Theaters currently employing project clients include: Blue Rider Theater, The Body Politic Theater, Commons Theater, Imagination Theater, Live Bait Theatrical Co., New Crime Productions, Piven Theater Workshop, Steppenwolf Theater Company, and Victory Gardens Theater.

Both the project vocational and artistic directors engage in aggressive liaison activities with the theaters to monitor client progress as well as future hiring needs. Many liaison activities are accomplished through weekly site visits to the companies themselves to meet with administrative staff. Other contacts occur through regular phone calls to theater managers and artistic directors about current client progress and future labor requirements.

Job Task Analysis and Reasonable Accommodation. As new theaters sign on to work with the project, negotiations take place regarding specific job tasks that will comprise each position. This enables project staff to assure appropriate and satisfying opportunities for both clients and theaters. It also allows for reasonable accommodation of workers with psychiatric disabilities, as mandated by the ADA (Cook, Jonikas & Solomon, forthcoming). This involves extensive job task analysis and, sometimes, job restructuring. Scheduling of hours, compensation, benefits, supervision arrangements, job duties, job training, and provision of ongoing vocational support through the project are all decided upon formally prior to a client's job start date.

Individual placements arranged thus far involve work in the business and box offices of theaters using personal computers, duties related to ticket sales, and general administrative tasks. One client became the House Manager of the Commons Theater and was nominated for "Best House Manager" by the prestigious Jefferson Awards, a committee recognizing outstanding professional theater arts in Chicago. Another client went on to become an integral part of the Blue Rider Theater Summer Festival's house management. He oversaw the box office, concessions, and general technical matters concerning the performers.

This year saw the development of a group placement system for the Theater Arts Project. New Crime Productions hired a group of clients to work during the day preparing the theater for each night's performance for as long as the show ran. This involved three people working four to five days a week for approximately three hours per day. When the New Crime production ended, Blue Rider Theater valued the group's work so highly that theater management hired the Thresholds group placement for the remainder of the run of their Summer Festival.

In a short while, other theaters began to learn about the TAP and several contracted with the agency to establish group placements. As a result of this increased volume of work, the Theater Arts Crew was created. This is a group placement with no time limits or minimum work week requirements. The Crew is different from most of the Thresholds vocational group placements in that the clients move from theater to theater as needed, rather than remaining in one location. The Crew expands to cover theater needs as productions change.

This sort of system is very beneficial for those clients unable to maintain an individual placement as well as those who need the additional social support of a group placement. The Crew is flexible and allows more people to transition into working without crippling fear of failure. Since the inception of the Crew, over 25 clients have taken advantage of this employment opportunity.

As the Crew became more systematized, a client who was especially good at working both with theater personnel and other clients was hired by Thresholds to supervise the Crew. This consumer job coach is supported and supervised by the vocational and artistic directors. Use of a peer job coach model has proven beneficial in several ways. The project gained a knowledgeable and dependable Crew leader, who serves as a mentor and role model for the Crew. The agency now has a representative in the theater community who, by his work, destigmatizes mental illness. And lastly, the Crew leader has been able to benefit personally, through acquiring vocational experience supervising others in a paid position in the theater community.

Ongoing Vocational Support. Meetings with clients as they work at

Photo by Thresholds

the theaters occurs on a weekly basis. Drawing on research conducted by the Thresholds National Research and Training Center (Cook, Solomon & Mock, 1989; Cook & Razzano, in press), the major model of service delivery is mobile job support. In this method of job coaching, clients are served on an as-needed basis at the work site or in the nearby community. This involves meetings at the theater site, lunches and coffee breaks at restaurants in the neighborhood surrounding the job, or meetings at the rehabilitation facility.

Phone contact with employers also occurs on a weekly basis to monitor clients' progress and anticipate any problems that may arise. This involves employer liaison and distribution of employer support materials such as the Thresholds Employer Information Manual, designed to be distributed to employers after Thresholds clients have been on the job for about a month (Cook & Jonikas, 1990). Dealing with employers' concerns is a major feature of ongoing vocational support in the project.

An important source of vocational support for Theater Arts clients has been a weekly support and information group. The TAP Support Group is well attended and provides clients with information about new Crew positions, complementary tickets to theater performances around the city, and time for socializing after the main meeting. Often, there is a planned activity such as acting exercises taught by clients who have learned them in theater arts classes. The TAP Support Group has been a place for clients to talk about any difficulties they have on their jobs with supervisors, coworkers, or the public. The group provides the vocational director and the Crew leader with the chance to gain a valuable perspective regarding how clients are doing on their jobs and how satisfied they are with their positions.

Theater Professionals as Co-Workers. Project members encounter higher than average acceptance from their non-disabled co-workers since theater artists appear to be less fearful of persons with symptoms and impairments related to mental illness. In fact, the actors' ability to see the **strengths** and artistic **abilities** of people with psychiatric disabilities enables clients to integrate more fully than in other job settings. This mutual comfort level between project clients and their co-workers has offered each group opportunities for professional and artistic growth.

Development of Performance Opportunities. At the end of the first project year, staff began planning a performance to be held in a professional theater. Using poetry and prose written by project clients, two professional directors, a lighting director, costume director, and musical director were hired along with their client counterparts for this performance. This creation of vocational opportunities for clients enabled project staff to expand the types of work they could offer clients.

Next, the project was invited to perform at a national conference on mental health research sponsored by the National Institute of Mental Health at the University of Chicago, School of Social Service Administration. Once again, project clients were hired along with their professional counterparts in roles involving stage managing, directing, costuming, set construction, musical direction, and publicity. This created still more vocational opportunities for project clients. In addition, the performance disseminated the project and its mission to over 200 researchers and service deliverers attending the conference from around the country.

Next, a two-act production of "Crowd" and "I'm So Far Behind I Thought I Was First" was staged at the Blue Rider Theater in Chicago. The show consisted of original stories, poetry, music, improvisation, and movement taken from the work of 50 artists who are project clients, members of New Crime Productions, or staff at the Blue Rider Theater. New Crime's associate artistic director and Blue Rider's artistic director worked with the troupe for several months to put the show together. The emphasis in mounting the performance was on artistic expression rather than therapy or rehabilitation. "People who are artists and mentally ill shouldn't be deprived of doing theater. If they get

something out of it that helps their mental health, that's great, that's partly why we're doing it. But it's more about quality of life, letting people express themselves." Subsequent performances at professional theaters around Chicago have enabled the group to expand its repertoire of job skills and artistic experiences.

Establishment of Apprenticeship Opportunities

Individual theaters such as the Center Theater and the Live Bait Theater negotiated apprenticeships so that clients could learn skills related to acting and to the managerial side of a small theater such as the use of computer data bases. The project vocational director works with the apprentices and the artists to develop and monitor their Apprenticeship Contracts. Project vocational and artistic directors deliver in-person assistance and support through site visits as well as immediate phone assistance. The focus is on allowing the professional and apprentice to work independently using the Apprenticeship Contract as a guide, with support from project staff as needed.

Many apprenticeship opportunities were created around the performances held in Chicago's professional theaters and at the University of Chicago. In preparation for the productions, professionals were recruited for apprenticeships in lighting, music, production, artistic direction, acting, and costuming. Clients involved in acting apprenticeships were required to participate in introductory acting classes prior to the apprenticeships to ensure theater "common ground" for professionals and apprentices.

Apprenticeship opportunities are advertised throughout the year, with announcements at the support group meetings and signs around the agency. As clients express interest, the screening committee (composed of project staff, clients, and theater professionals) matches professionals with apprentices. Interest in apprenticeship opportunities is brisk and all production area slots fill up quickly. The success of this component has been its location in the context of preparing a live, theatrical performance in which clients and professionals present their artistic collaboration in a commercial professional theater setting. Evidence that apprenticeship skills lead to better job opportunities is illustrated by the movement of one client into a House Manager position after his administrative apprenticeship. Thus far, 32 project clients have completed theater arts apprenticeships.

Participation in Theater Arts Classes with Non-Disabled Peers

Piven Theater Company professionals agreed to work with TAP clients who are interested in developing acting skills by participating in theater arts classes. Classes began at the end of the first project year, with two sections meeting once a week for four hours. Instructors and non-disabled students participating in the classes are associated with Piven Theater. Emphasis is on helping students relax and become comfortable experimenting on stage through theater games and exercises.

Other theater arts classes have been offered by the Blue Rider Theater. Artistic director Lachman notes that, "These people are so amazing. They are tremendous improvisers, always responsible, the best listeners. I teach all over the Chicago area, and these are some of the best students I've ever had."

Altogether, 42 project clients have been students in acting and theater arts classes.

About the Thresholds National Research and Training Center

This project is one of several being conducted at Thresholds, a psychosocial rehabilitation agency located in Chicago. The agency received a grant in 1990 from OSERS' National Institute on Disability and Rehabilitation Research to establish the Thresholds National Research and Training Center on Rehabilitation and Mental Illness. The Center has a wide range of resource information services including a free DATA-FAX hotline. For more information about the Theater Arts program or other psychiatric rehabilitation services, contact the Center at 312/348–5522.

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Closing the Sheltered Workshop:
A Case Study of Agency Change

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The following excerpt was taken from an upstate New York newspaper article which described the closing of a Syracuse area sheltered workshop:

The legally blind and multiply handicapped young woman sat at her work station recently, counting out eighteen screws to put into a cellophane bag, and explaining why she is happy with her life in Syracuse. "I come to work every day. That is something I couldn't do back home. I've met a lot of friends." Ms. Durston [not her real name] has a fierce pride in her job. She earns one cent for every bag she fills. She proudly remembers, to the penny, the $12.71 check she once got for a week's work. Since she moved two years ago to the Pioneer Center, a private agency for adults who are blind and multiply handicapped, a new world has opened up to her.

But her expanded world may be closing again, starting next month when the Pioneer Center will be forced to close its doors. If the Center should close, it would force 28 clients to find new facilities to meet their needs. The clock is ticking on the facility (*Buffalo Evening News*, September 1986).

When this story appeared, the clock was indeed ticking on the Pioneer Activities Center of Syracuse, New York, and the people it was serving. The organization was plagued with internal turmoil, had lost the confidence of referral and funding agencies, and was about to file for bankruptcy protection under Chapter 11.

Not reflected in the preceeding newspaper article, but perhaps as significant, was the fact that the clock was also ticking on the sheltered workshop concept, a concept which had come under heavy criticism for failing to serve the employment interests of individuals with severe disabilities. Citing Department of Labor studies in 1977 and 1979, Whitehead (1987), for example, indicated that sheltered workers had only a 10 percent chance of finding community employment. In New York State the outlook for sheltered employees was even bleaker. A study conducted in 1983-84 by the New York State Office of Vocational Rehabilitation concluded that only 1.7 percent of 16,000 workshop participants found competitive work. Moreover, the wages earned in sheltered facilities were abysmally low. Those who were blind earned about $1.96 per hour while people labeled mentally retarded earned $.85 an hour.

With the enactment of the 1986 Rehabilitation Act Amendments, our national employment policy toward people with severe disabilities underwent some dramatic changes. Through these Amendments, state-federal vocational rehabilitation services were made available to individuals with severe disabilities who previously have been served only in segregated facilities, and were thought to lack the potential for unassisted, competitive employment.

These changes, and the ideological and fiscal support that accompanied them, enabled Pioneer to change from a financially troubled, segregated workshop to a fiscally sound, integrated employment service for people with severe disabilities. In fact, the bulk of funding for Pioneer's conversion was provided through a federally funded Statewide Systems Change Grant, and a Natural Supports Demonstration Project, both provided by the Rehabilitation Services Administration of the U.S. Department of Education's Office of Special Education and Rehabilitative Services.

Pioneer's History

Pioneer was founded in 1950 as an "innovative, multi-purpose day activity center for the multiply handicapped blind and aging." In the early 1960s Pioneer merged with a local sheltered

Diagnostic Classifications of Workshop Participants

Number of People	Diagnostic Classification
21	Visual disabilities (six people had some vision)
11	Mental retardation (ranging from mild to severe)
8	Visual, developmental, and physical disabilities (4 persons used wheelchairs)
4	Visual and hearing impairments (including one person who also had a psychiatric designation and another who was classified with severe mental retardation)
4	Visual disability and emotional impairment
2	Seizure disorders (moderately well controlled) and visual diabilities

workshop, but reincorporated several years later as a specialized program for people who were blind and had other disabilities. Since 1966 Pioneer operated as a small social, recreational, and work training program, receiving funds primarily from the New York State Commission for the Blind and Visually Handicapped (CBVH) and the New York State Sheltered Employment Program (SEP).

In 1975 Pioneer expanded its services to include a "domiciliary care facility for blind, multiply handicapped adults," an operation funded by the New York State Department of Social Services. With the addition of this ten person group home, Pioneer emerged as a unique organization within New York State. Under one organizational roof and in one locality, the agency offered people with blindness and multiple disabilities what was described in its brochure as a "holistic approach" to rehabilitation. This meant that a congregation of people who were blind were offered a place to live, work, and recreate together in order to meet the "development needs of the total person." This arrangement apparently appealed to many family members and professionals, and to obtain such comprehensive, protective, and congregate care, they referred people to Pioneer from all over New York State.

The Sheltered Workshop: At its peak, Pioneer's workshop had between 35 and 40 people, 21 of whom were served after the conversion.

The age range of those attending the workshop was 24–55 years, and the average age was 35. Most of the workers performed contract bagging and assembly jobs which were secured by the agency from community businesses. At the time of the conversion people had spent an average of seven years one month in the workshop.

The Beginning of Change

Community Commitment to Conversion: Between January, 1988 and April, 1990 the Pioneer Activities Center became The Pioneer Agency, Inc. However, the modifications to the organization went far beyond a name change. During this time Pioneer was converted from a sheltered workshop to a completely integrated employment service for persons with disabilities. The major objective of the converted agency's staff was to assist people in finding individual community jobs of their choice using a natural supports approach to integrated employment (see Nisbet & Hagner, 1988).

The two-and-one-half-year project reflected a truly unified community commitment to change as well as cooperation by local and state human service professionals, families of people with disabilities (including those in the workshop), workshop participants, Pioneer's Board of Directors, and staff.

Proposed Agency Conversion

An initial and preeminent decision was made to completely convert the organization from one type of service ideology and practice to another. The initial plan called for the total replacement of a readiness service model, as manifested by the sheltered workshop, with a community inclusion/supports approach in which all people served by the agency would be found community jobs and supported in the most individualized, valued, and natural ways possible.

While most in the community were very positive about the proposed changes, there were those who did not believe that all people in the workshop could find community employment because they were too disabled and vocationally unprepared. Further, people counseled that there were not enough financial resources or trained people to provide integrated services for those in the workshop, and that a conversion effort should wait until supported employment had become more firmly established professionally

Amount of Time Spent in the Workshop

Number of People	Time in the Workshop
8	< 5 years
8	6–10 years
4	11–15 years
1	> 15 years

Calculated at the time the conversion began.

Photo by David Snyder

and fiscally. It was also argued that the agency should not totally abandon its sheltered workshop but improve it in order to provide financial stability to the agency and vocational security for its participants. Some contended that the agency was in such deep financial trouble that the change effort could not be successful, and should not even be attempted because its failure might discredit altogether the idea of integrated employment for people with severe disabilities.

All of these concerns proved to be exaggerated or baseless. All people in the workshop were found to be employable, though not everyone elected to pursue a community job. While funding sources were not well established, plentiful, or secure, they were sufficiently available to undertake a vigorous initial effort. Most importantly, however, the conversion effort itself worked as an incentive to search for and attract sources of funding which otherwise might have been ignored.

Staffing Changes: There was a dearth of trained staff, formal training, and technical assistance available in the community to begin the conversion process. However, since Pioneer had a unique way of providing services, staff training was conducted "in house." Pioneer did not provide congregate job placements. Also, staff were expected to provide all services from job development through follow-along, and to emphasize the use of natural worksite supports from the beginning of the placement process. The latter focus required that new staff learn to be employment consultants as much as direct instructors (see Hagner, Murphy & Rogan, in press).

The most valuable asset a prospective staff member could bring to Pioneer was not supported work experience but a commitment to the values of community inclusion and supports for all persons regardless of their disability. It should be noted that only one of the initial six people hired following the agency's conversion had

advanced degree credits, and only two had previous supported employment experience.

It was very important that the agency project an unambiguous, consistent message to its staff, service recipients, and community to set a clear ideological tone and establish a specific identity. Risk-reducing strategies suggested by some, such as maintaining the workshop or waiting until funding was more secure, were rejected as not only time consuming, energy sapping, and resource depleting, but also contradictory to Pioneer's central philosophy, mission, and practice. The philosophy of The Pioneer Agency, Inc. included the following major premises: 1. People with disabilities have the right to the same commnity opportunities, risks, and activities as all other citizens, with the necessary supports to achieve maximum community participation; 2. Having a community job is a right, not a privilege to be earned; and 3. Agency methods and outcomes must be culturally valuing, individualized, socially integrative, and consumer oriented.

These basic philosophic principles translated into several specific agency practices including:

Unconditional Inclusion/Zero Reject:

No one was rejected for services, regardless of the severity of his or her disability and/or the poverty of their predicted employment prospects.

Individualized Person-centered and Community-based Assessments:

Individual assessment placed a premium on personal interests, preferences, and strengths using individual interactions and observations in typical community settings, such as social, recreational, and/or employment situations, and family or living places. Assessments also focused on analyzing settings since a major emphasis of assessment occurred after placement when aspects of the person's job tasks, social situations, and on-site supports were analyzed and, if needed, modified.

One Person—One Job—Based on Active Individual Involvement and Personal Preference:

All placements were individual and based on an individual's interests, communicated during either pre- or post-placement interviews; i.e., staff looked for jobs with a particular person in mind.

Individual, Varied and Valued Placements:

No enclaves or group placements were used. Also, the focus was on finding non-stereotypic jobs in a wide variety of valued settings such as universities, libraries, and offices.

Supported Services with Maximum Continuity:

Services were structured to foster a sustained relationship and sense of continuity between the support provider and the support recipient. Thus, the same individual who assisted a person in finding a job was also the person who helped arrange on-site training, and assisted with any long term problem solving and follow-along.

Natural Work Site Supports which Conform Most Closely to the Typical Routines and Practices of a Specific Setting:

In supported employment, job supports such as orienting a new employee to the setting, providing transportation, conducting on-site training, and performing follow-along coaching have traditionally been done by human service professionals. The emphasis at Pioneer was to supplement and even replace these professional procedures with more naturally occurring practices, such as supervisor and/or coworker orientation, training, socializing, and follow-along assistance. The employment specialist served as an ongoing consultant to regular employees if any job changes occurred or problems arose.

Employment Outcomes

Of the 30 people enrolled in the workshop, 20 became employed in community jobs. It may be seen that people described as "unemployable" not only were able to significantly improve their income through community work, but were able to function in a variety of different jobs.

Of the ten persons who were not found jobs, one left the program before he could be found a position, and nine left the workshop before the conversion began. Most of the ten people who eventually withdrew from Pioneer had attended the workshop only sporadically during the previous year.

It should be noted that following its conversion, Pioneer provided integrated services not only for its workshop participants, but also for people referred from outside the agency. Thus, in addition to its 20 workshop participants, the agency has found community jobs for about 50 other individuals with severe disabilities.

Staffing Issues

Organizing Community-based Staffing Patterns: At the time of conversion the staffing patterns of the agency were very traditional, with the bulk of positions focused on internal programming. When the conversion began, many of these positions were eliminated. Far fewer types of positions remained indicating, not only a reduction in staff, but a change in agency focus to an extra-agency direction.

One of the prominent changes that occurred within the reorganized agency structure was the development of a single core position--the Community Job Specialist (CJS). It was the CJS job description that served as the hiring criteria for all new vocational personnel, and that reflected Pioneer's new orientation.

Summary

Many conclusions and recommendations can be gleaned from the Pioneer conversion. Certainly, Pioneer's situation has many unique features that would not be duplicated in other agencies. However, there may be

Types of Jobs Obtained for Workshop Participants

Job Type	Number of Jobs Found
Assembly	9
Laundry	6
Clerical	5
Telemarketing	4
Food Services	3
Human Services	3
Maintenance	3
Reception	3
Housekeeping	2
Stock Clerk	1
Total	*39

* Average of 1.9 jobs per person

enough commonalities so that others should consider the following recommendations for conversion:

1. ***Don't wait for all the pieces to fit before you begin to change.***

All the pieces of an agency conversion will never fit perfectly at any one time. In the case of Pioneer, almost everyone thought the idea of conversion was a good one, but few believed there existed the resources to do the job. What they failed to anticipate and understand was the unanticipated dynamic of change. The Pioneer changes led to changes in the way the agency was perceived. This led to new opportunities and a new receptivity on the part of people who, heretofore, could not or would not support the agency. Also, the conversion changed the staff and forced them to seek resources previously untried.

2. ***Secure Strong Leadership.***

It sounds very trite to say that the most important ingredient in change is the commitment to change. But this applies to the many organizational levels of human services from direct service provider to agency director. Strong leadership from agency directors is critical for both beginning and sustaining the change process.

3. ***Establish clear and unambiguous service values and practices, and stick to them.***

It is important that the proposed change process and outcomes be clearly communicated to others with whom you will be working. Such values should be continuously reinforced and not clouded by contradictory service methods pursued for economic or professional efficiency.

4. ***Find people with values consistent with agency goals and pay them properly.***

The importance of staff values has been noted. People also need to be paid a respectable wage. At the time of the conversion, new Pioneer staff began at a salary level 20 percent higher than that paid by most area agencies. This sent a clear message to staff that their work was valued, that they were doing important work, and that much would be expected of them.

5. ***Capitalize on individual staff strengths.***

While Pioneer expected each staff member to provide a variety of services to people he/she was serving, the agency also recognized that values and practices could be implemented in numerous ways, and that each person had personal likes, dislikes, strengths, and weaknesses. In order to accommodate such diversity, supervisors encouraged staff to work cooperatively on such tasks as job development and follow-along, and to pursue job development, coaching, and natural supports activities in ways with which they were most comfortable.

6. ***Educate the staff, board, funding sources, and community professionals regularly on agency mission and methods.***

Old images, beliefs, and habits die hard, and people often referred to Pioneer's previous mission, characteristics, and practices as if they were, or should be, operational. This kind of education reminded people of the agency's current philosophic commitment and practical direction, and the irreversibility of these activities. Such education also reminded people of the importance of finding solutions consistent with the agency's current mission so as not to revert to old ways and previous times.

Conclusion

An often posed question has been if conversion is possible and appropriate. Recently, more people have been asking not if, but how. This brief synopsis of the conversion of Pioneer represents one of many such efforts currently underway across the United States.

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AN OSERS News in Print SPECIAL FEATURE ARTICLE

Medication and School Behavior

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Photo by Daryl Snyder

There is little doubt that the school environment is one of the most challenging settings for a hyperactive child. Some hyperactive children begin to experience problems during the preschool years. However, it is more common to see education and behavioral problems become more serious in first or second grade. Parents and school personnel may adopt a "wait-and-see" attitude only to find things have not improved much by third grade. For reasons that we do not fully understand, the transition from second to third grade is a big step for many children. It is during third grade (8 to 9 year olds) that we find the largest number of children receiving special education and the largest number of children taking medication for hyperactivity. At the present time, researchers estimate that at least three-quarters of a million school children are on medication for this disorder and by far the most commonly prescribed drug is Ritalin (methylphenidate). When a doctor counsels parents about the possibility of drug therapy, one of the most common questions is "What does it do?" Over the past fifty years, scientists have put together a fairly comprehensive picture of what stimulant medication can and cannot do for hyperactive children. In this brief article, I am going to present an overview of how stimulant medication affects the behavior of hyperactive children in the school setting.

At the outset, it is important to emphasize three very important points. One, there is no such thing as a typical hyperactive child. In addition to differences in the age at which their symptoms become clinically serious, hyperactive children differ with regard to the types of problems they have. Some fairly common ones are tantrums and defiance of authority figures (oppositional behavior), aggression and other forms of antisocial behavior (conduct problems), not doing well academically (underproductivity, learning disabilities), chronic or episodic periods of marked sadness or unhappiness

(depression) or worry (anxiety) that interfere with normal daily functioning, and occasionally tic disorders. The important point is that the way medication helps a child depends on what is wrong. Two, for reasons that no one fully understands, not all hyperactive children respond to stimulant medication in the same way. Three, even when stimulant medication "works," hyperactive children still have good days and bad days.

School Behavior

The best way for a scientist to find out what hyperactive children do in school that makes their behavior such a problem and what medication does to change this is to go where the action is. This is not as easy as it sounds because you need special permission to get in; once you get there not everyone likes strangers snooping around; and most important, it is very time consuming. For these reasons and a million others, not very many researchers "go to school."

Ironically, the first person to conduct in-depth studies of the effects of stimulant medication on hyperactive children actually worked in a school for children with learning and behavior disorders. His name was Charles Bradley, the school was in Rhode Island (it is still there), and it was during the 1930s that he began his research (Bradley, 1937; Bradley & Bowen, 1941). No one knows for sure why he gave stimulant medication to these children, but the important thing is that he did. Bradley was an astute observer of human behavior, but he was also lucky because stimulants proved to be a truly powerful and well-tolerated treatment. Discoveries such as this are not made very often. Bradley observed that when taking stimulant medication, the students in his school spent more time on their school work and less time arguing and fighting among themselves, which still holds true. With the passage of time, more and more reports appeared in the medical literature attesting to the effectiveness of stimulant medication as a treatment for hyperactive children. By the mid 1960s, Ritalin appeared on the American scene and soon became the "drug of first choice" for the treatment of this disorder.

Effects of two doses of Ritalin (methylphenidate) and placebo in a group of 10 aggressive-hyperactive boys on the rate of occurrence of four categories of classroom behavior.

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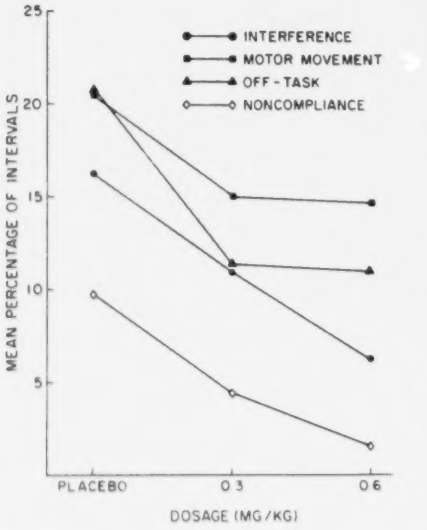

Effects of two doses of Ritalin (methylphenidate) and placebo in a group of eight aggressive-hyperactive boys on the rate of occurrence of physical aggression directed toward a peer on the playground.

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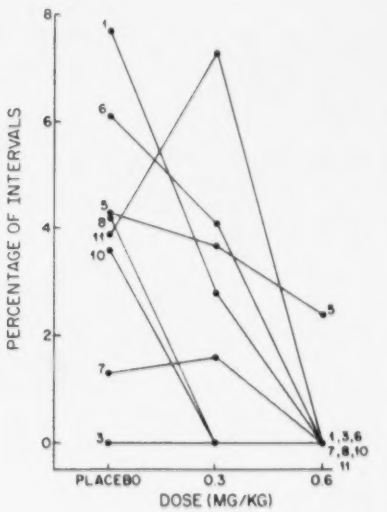


In the 1970s, approximately forty years after Bradley's initial discovery, scientists decided to go back to school to see for themselves. The first large-scale study was conducted by Rachel Gittelman and Howard Abikoff at Long Island Jewish-Hillside Medical

Center. These researchers went into scores of schools on Long Island to evaluate the effects of Ritalin and behavior modification on hyperactive elementary school children. Using a specially devised observation code, their trained observers tallied the number of times children engaged in specific types of behavior in the classroom. Among their findings were the following: The two classroom behaviors that most clearly differentiated hyperactive children from other students was the amount of time they spent disturbing other children (interference) and not doing their school work (off-task) (Abikoff et al., 1980). Treatment with Ritalin increased the amount of time that the children spent on-task and decreased interference and motor activity (Abikoff & Gittelman, 1985). In fact, the degree of improvement was so great that many of the hyperactive children were indistinguishable from their peers. In other words, on medication their behavior was in the normal range. Abikoff and Gittelman called this a "normalizing" effect. Some behaviors such as inattention and distractibility showed a lesser degree of normalization.

Given the difficulties associated with doing research in public schools, scientists began to devise ways of studying school-related behaviors under more controlled settings, which resulted in the development of laboratory schools. Two of the most noteworthy were established by Carol Whalen and Barbara Henker in California and by Bill Pelham in Florida (now at Pittsburgh). Studies conducted by these researchers have also shown that stimulant medication increases the amount of time that hyperactive children spend doing their school work, increases the amount of work that gets done, and decreases a variety of negative social interactions (Pelham et al., 1985; Whalen & Henker, 1984).

With the passage of time, other scientists joined in to establish observation programs of their own. The one that we developed at Stony Brook, New York, involved going into the public schools and conducting observations to determine the optimal dose of medication (Gadow et al., 1990, 1991a). Like others before us, we found that Ritalin decreased hyperactive, disruptive, and aggressive behaviors in the classroom (see Fig. 1). Certain types of behavior such as interference required higher doses of medication to achieve a normalizing effect than other behaviors such as off-task. Further, the dose that improved disruptive behaviors the most also resulted in unusually high levels of

"good" behaviors such as sitting quietly and doing school work (Gadow et al., 1991b). We have called this a "supranormalizing" effect. We believe that for some children supranormalization is an indication that the dose of medication is unnecessarily high.

To better understand how medication influences social interactions, researchers ventured into the lunchroom and onto the playground where it became possible to study almost every type of behavior known to children (Gadow et al., 1990; Hinshaw et al., 1989). Here, Ritalin reduced the level of verbal aggression in hyperactive children, and more importantly, decreased physical aggression (see Fig. 2) initiated by the hyperactive child and directed toward his or her peers. In many of these same children, the overall level of appropriate social interaction remained the same or actually increased. In other words, medication appeared to decrease negative interactions without interfering with "good" social behaviors.

Teachers and Classmates

One may well wonder what effect the hyperactive child's behavior has on his teachers and classmates. One of the earliest studies to actually look into this question was a follow-up study of hyperactive children conducted by Susan Campbell and her colleagues (Campbell et al., 1979). In this study, they were able to show that elementary school classrooms that contained hyperactive children were more disruptive and that the teacher was more negative than in classrooms that did not contain a hyperactive child. In other words, some hyperactive children are able to instigate disruptive behavior in other children, and the teacher responds by becoming more negative toward the class in general. In some situations, successful treatment with stimulant medication can have a significant impact on this situation. Whalen et al. (1980), for example, showed that on days when hyperactive children were receiving placebo, their teacher's reactions were more intense and more controlling than on days when they were taking Ritalin. This was true for nonhyperactive children in the class as well. In a recent study conducted at Stony Brook, we found that classmates sitting in close proximity to an aggressive-hyperactive child were less aggressive when the hyperactive child was receiving Ritalin compared with placebo (Gadow et al., 1990b).

The findings from these and other studies show that in some cases the hyperactive child can have a big impact on the classroom environment. A disruptive hyperactive child can interfere with the activities of others, including the teacher, and in all likelihood provoke disruptive behavior in classmates. Situations such as this often prompt referral for special education, especially if the child is below average academically. Effective Ritalin treatment has the capability of altering the dynamics of this entire situation.

Academic Difficulties

Another aspect of school behavior that is a major concern of parents and teachers is poor academic performance. Parents worry that their son or daughter will eventually drop out of school or will not be eligible for college due to poor grades. If their son or daughter is also a behavior problem at home or school, parents may worry that their child is headed for a life of crime, drug abuse, or irresponsible behavior. Teachers share many similar concerns about children who do not do well academically. If a child is not learning or refuses or forgets to do his or her work, this can be a source of frustration for teachers. Children who have to be constantly reminded to do things or who need a lot of supervision require extra effort and take time away from teaching lessons and interacting with other children who may also need assistance.

Children who are not doing as well as expected or who are not keeping up with the rest of the class are generally referred to as underachievers. There are many reasons why a particular child may be an underachiever. In order to better understand the way in which medication affects the child's ability to do daily seat assignments and homework, it is helpful to know something about the different kinds of academic problems.

Some children are doing poorly compared with others because they have below average intellectual ability. Such children are sometimes referred to as slow learners. When given an individually administered intelligence test, they generally score between 70 and 85. (An average score is 100.) It is normal for slow learners to be a year or two behind their classmates. However, intellectual ability is not fixed; the child's environment also plays an important role in determining his or her potential. With appropriate encouragement and support, some youngsters can do better than expected.

Other children do poorly on standardized achievement tests even though they have the intellectual ability and the motivation to do better. Children who have the ability to learn just like other children but who, for some reason, cannot seem to do as well are said to have a learning disability. Many experts believe that the cause of the learning disability is often linked to some type of disturbance in brain function. The most common type of learning disability is difficulty with reading. However, other types of academic skills such as arithmetic, writing, spelling, and so forth can also be affected. Children with a learning disability often need some type of special education during the course of their academic careers, and according to federal law, local school districts are required to provide such services when appropriate.

Some children who do not do their school work are also referred to as underachievers. Teachers often characterize such students as "not working

up to their potential." They have the aptitude (as measured by an intelligence test) and the skills (as measured by an achievement test) to do better on their report cards (academic grades), but for some reason do not do their daily work assignments. In a certain sense, such students can be characterized as being underproductive. Underproductive children are often described as being unmotivated, and they are not eligible for special education simply on the basis of not doing their work. Because school grades are based in large part on the amount of correct work completed, underproductivity is often considered to be an important problem. Teachers reprimand the student for not doing his or her work, and parents are often dragged into the raucous in an attempt to increase child motivation and compliance with school requirements.

Why a particular child is underproductive is often a mystery for the teacher, parents, and doctor. If the child has some other problem, it is often seen as the cause of the failure to do school work. For example, when a hyperactive child does not do his or her work, it is generally assumed that whatever is causing the hyperactivity is also contributing to the academic underachievement.

Academic Measures

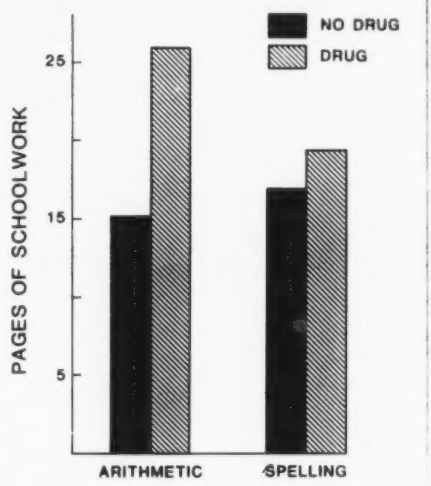
Academic performance is evaluated in a number of ways. Standardized achievement tests are administered in most school districts at the end of the school year to determine how much a child has learned. Achievement tests measure skill acquisition (providing statistics on a child's reading and arithmetic level) as well as factual knowledge. In general, children with greater intellectual ability do better on standardized achievement tests than children with lesser intellectual ability.

Another measure of academic performance is the amount of school work (productivity) that is completed accurately. Examples of productivity are the numbers of problems completed in a reading workbook or homework assignment and finishing a book report on time. Although no one would question the fact that there is an important link between practice (daily school work) and skill acquisition (as measured on an achievement test), productivity is often inappropriately equated with learning.

Academic grades reflect both learning and productivity, which is sometimes a source of confusion for parents, especially when trying to figure out what a medication does and if it is appropriate for their particular child.

Mean number of pages of schoolwork completed by 19 children during a one month time interval under Benzedrine (amphetamine sulfate) and no-drug conditions.

(From data reported by Bradley & Bowen 1940.)



Medication

Charles Bradley is generally credited with the discovery that treatment with stimulant medication results in an increased level of academic productivity (Bradley & Bowen, 1940). When taking medication, hyperactive children spent more time doing their school work and as a result the amount of work completed increased (see Fig. 3). The amount of improvement was much greater in some areas (arithmetic) than others (spelling). Since then, numerous studies of how stimulant medication affects academic performance have been published (reviewed by Gadow, 1986). Some researchers have reported that stimulant treatment results in better report card grades. However, studies that have attempted to determine if treated children actually learn more have generally been discouraging. For example, although hyperactive children score a little better on achievement tests when taking medication and the amount of gain increases with time, the overall effect is rather small. When medication is stopped for a period of time, the gains disappear.

Studies of nonhyperactive children with reading disabilities show that stimulants do not have a big effect on reading ability, especially for children who are receiving effective reading instruction. However, they may experience achievement test score gains in other areas, which unfortunately fade away after medication is stopped. Stimulant medication may help hyperactive children who have difficulty with reading, but the improvement is not cumulative. In other words, most of the gains occur during the first few months of treatment.

There are no studies of how stimulant medication affects the academic

performance of hyperactive slow learners. If stimulant medication can have such beneficial effects on the amount of work that a hyperactive child completes, it is reasonable to expect that children who take medication for several years will be further ahead academically than hyperactive children who do not receive drug therapy. Scientists have attempted to study this question by following hyperactive children into adolescence and adulthood to see if medication has had a lasting beneficial impact on their academic performance (reviewed by Gadow, 1991). They have looked at such things as grade point average, the number of grade retentions, high school graduation rates, years of college, and so forth. Contrary to what one might expect, there is no conclusive evidence that hyperactive children who receive stimulant medication in the elementary school years are any better off academically as adolescents or as adults than children who do not receive drug therapy. However, these studies do not prove that such long-term effects do not exist; they simply have not found them. A number of experts believe that if medication is taken at the right dose for a long enough period of time, some hyperactive children will experience lasting academic gains. Nevertheless, at the present time, it is not possible to predict who these children are or how they should be treated with medication.

It is important not to confuse the difference between lasting effects on adolescents who no longer get medication and the immediate effects on teenagers who are still taking it. For example, if stimulant medication can help some hyperactive elementary school children to complete their school work and receive better grades, the same is probably true for hyperactive adolescents. In other words, junior and senior high school students who require stimulant medication, and take it regularly, probably do better academically than hyperactive adolescents who do not receive medication.

Summary

In summary, treatment with stimulant medication can have beneficial consequences for many hyperactive children. In the classroom, medication increases the amount of time the child spends working on classroom assignments and consequently the amount of work that is completed. Medication also results in a decrease in the amount of time the child spends disturbing and annoying classmates. Hyperactive children who have a problem with aggressive behavior act less aggressively when taking medication. Because the hyperactive child is spending more time doing what is expected of him or her, the teacher may say that the child is more obedient (less noncompliant) and requires less supervision. Changes in the hyperactive child's behavior may lead to improvement in the entire classroom atmosphere, especially if their behavior is defiant, aggressive, or disruptive to others. The teacher may be less negative not only toward the hyperactive child, but toward others in the classroom as well. In some cases, other children in the classroom behave less aggressively when the hyperactive child is receiving medication because the hyperactive child is not provoking them. These improvements in the hyperactive child's behavior make him/her more like others (normalizes their behavior). It is important to remember that different behaviors are probably normalized at different doses of medication. Also, higher doses of medication can produce a state of unusually good behavior (supranormalization). The increase in work output is likely to result in better academic grades. Parents must remember, however, that stimulant medication does not cure learning disabilities and that treatment during the elementary school years does not mean that their child will be more successful in junior or senior high school, especially if medication is stopped prior to this time. Stimulant medication can also produce big improvements in social behavior in the lunchroom and on the playground. Studies show hyperactive children engage in less physical and nonphysical aggression in these settings when receiving medication. Although stimulant medication can produce a number of clinically significant improvements in child behavior, it must be emphasized that certain behavioral and educational interventions are also highly effective for the treatment of hyperactive children.

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